

1/15

The typical reactivity of C5aR specific mAbs

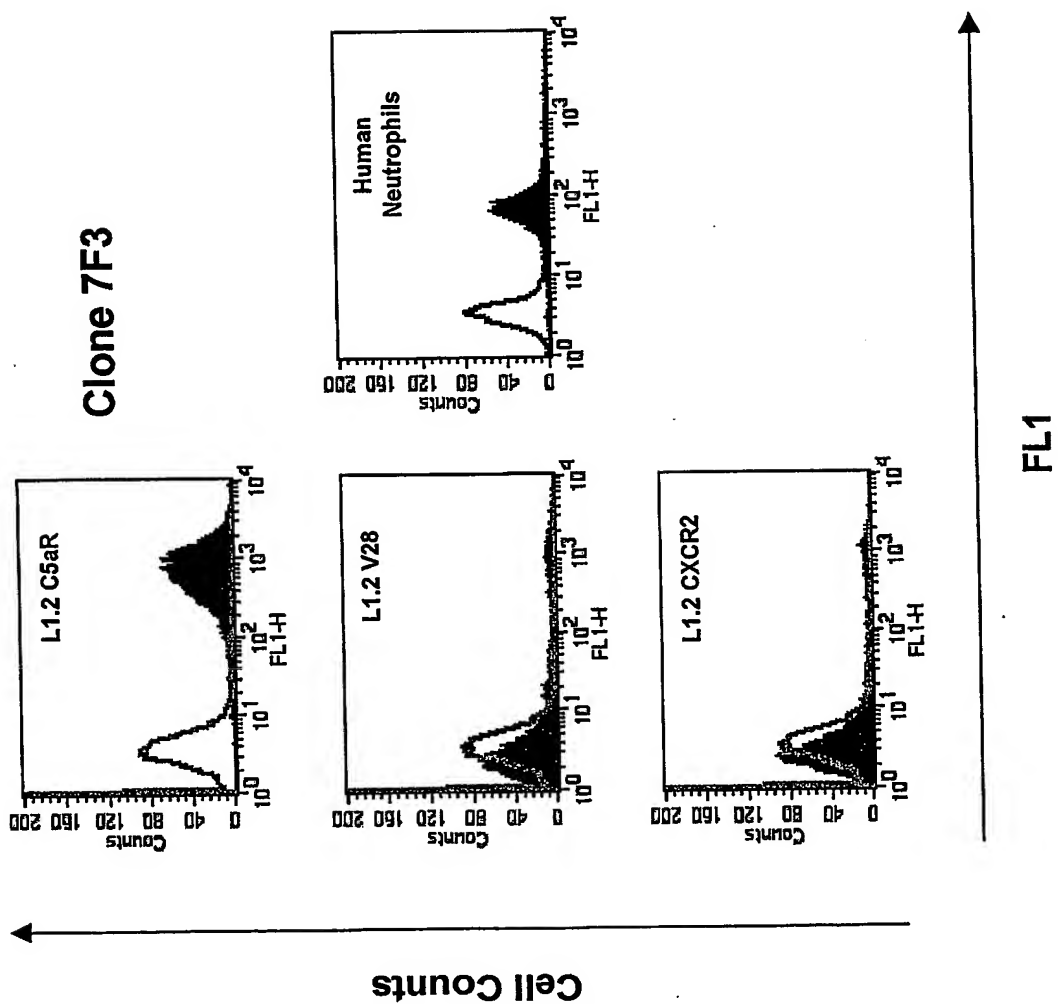


Figure 1

BEST AVAILABLE COPY

2/15

Certain mAbs to C5aR inhibit ligand binding

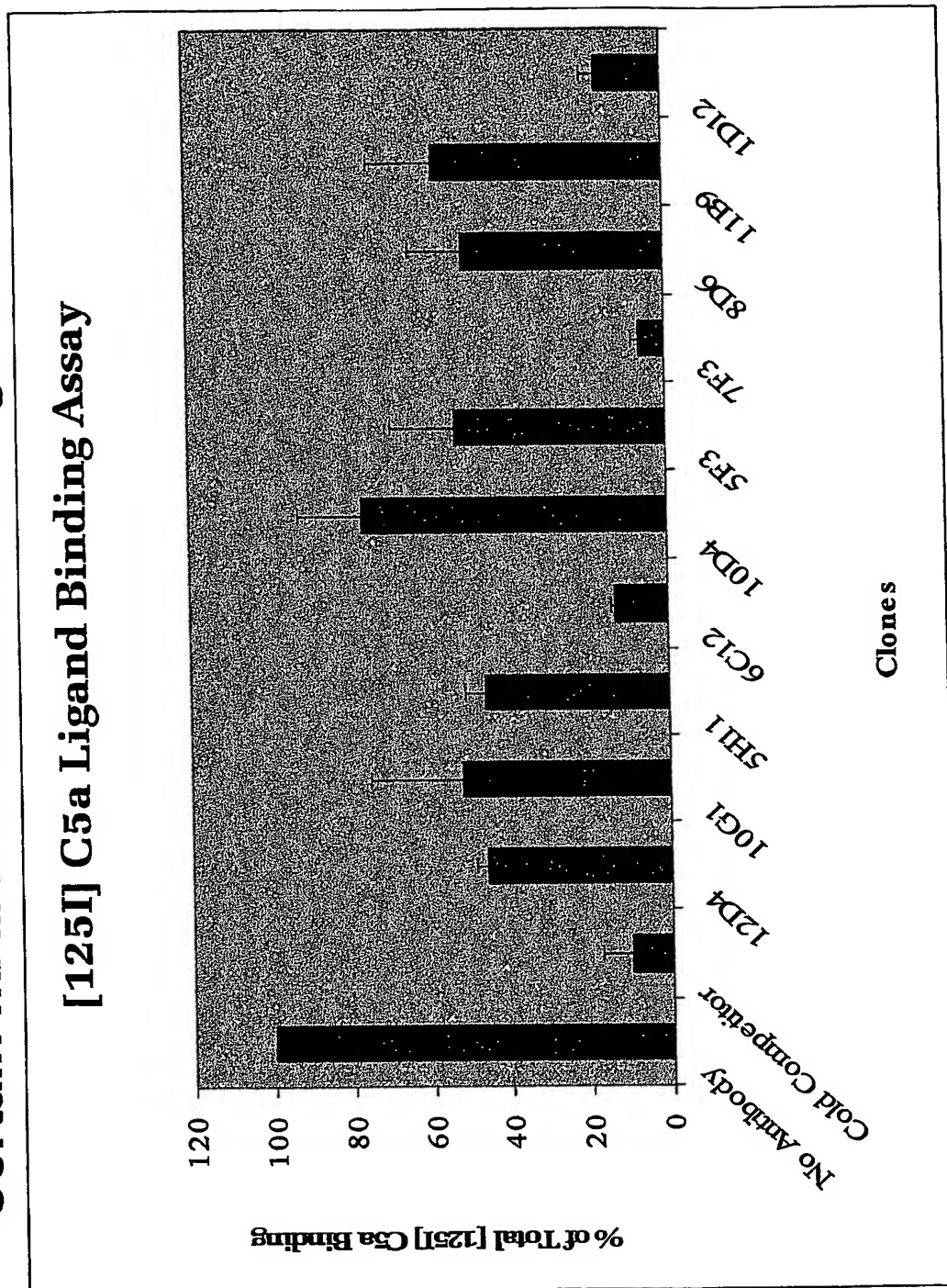


Figure 2

MAb 7F3 inhibition of ligand binding- dose response

Inhibition of radiolabelled C5a

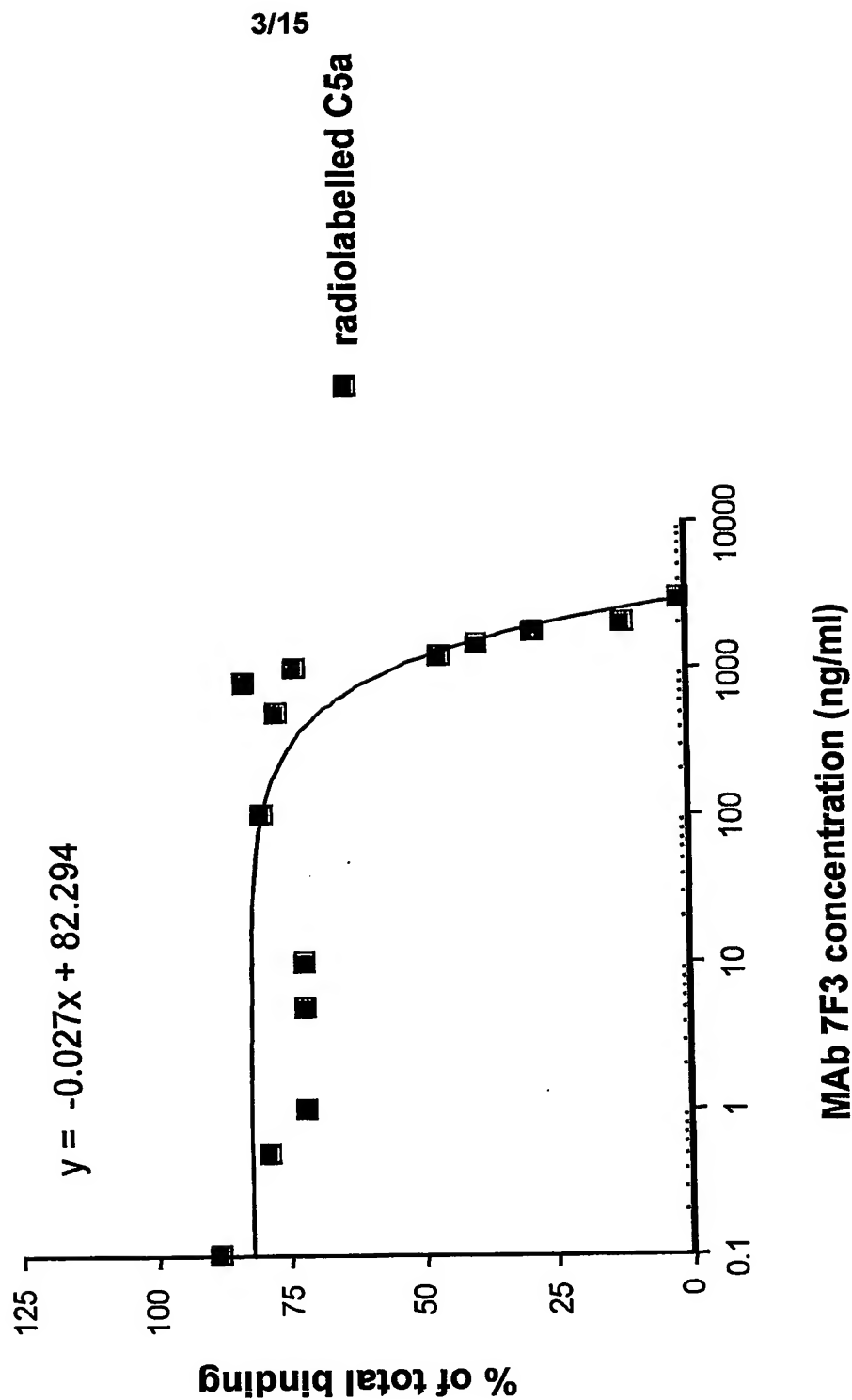
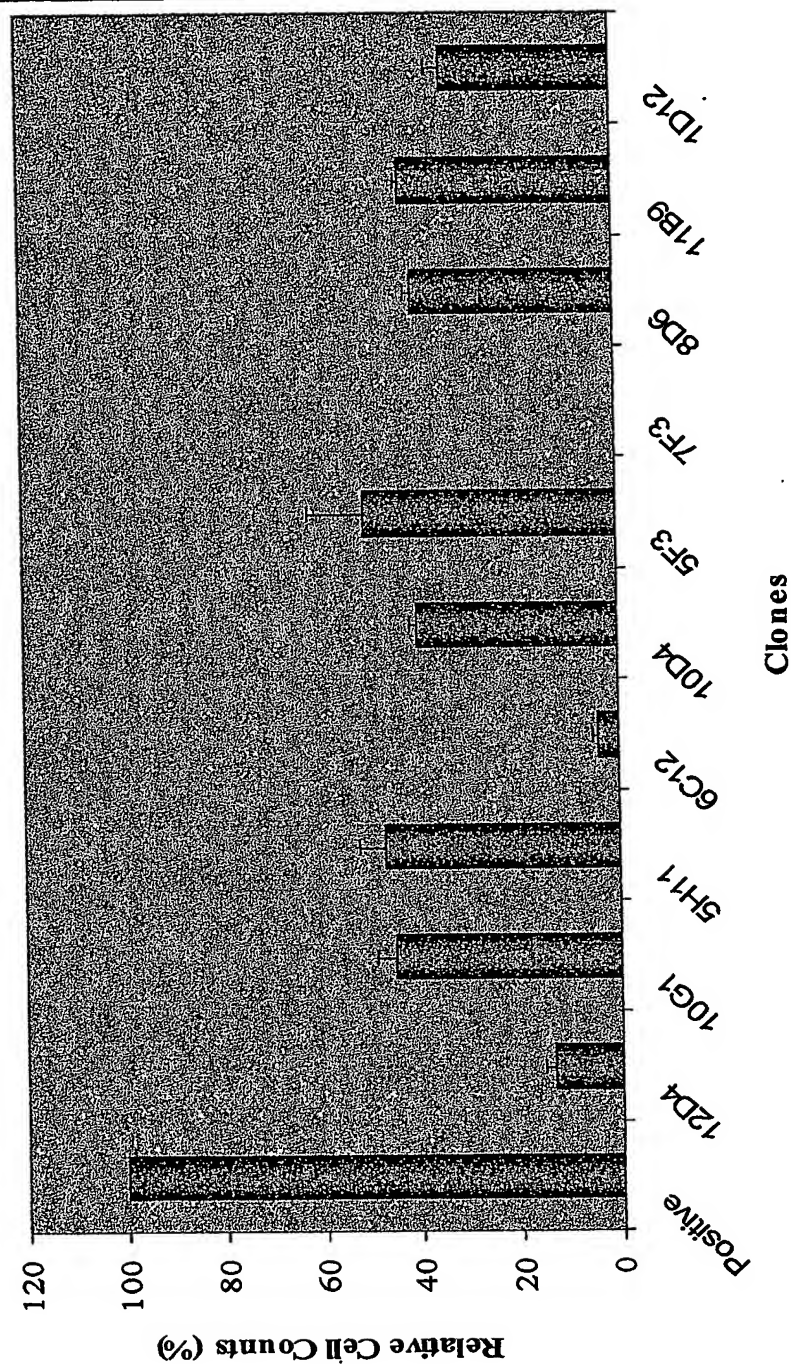


Figure 3

4/15

Complete inhibition of C5aR transfectant chemotaxis by select antibodies

Chemotaxis Assay

**Figure 4**

5/15

Complete inhibition of L1.2 C5aR transfectant chemotaxis

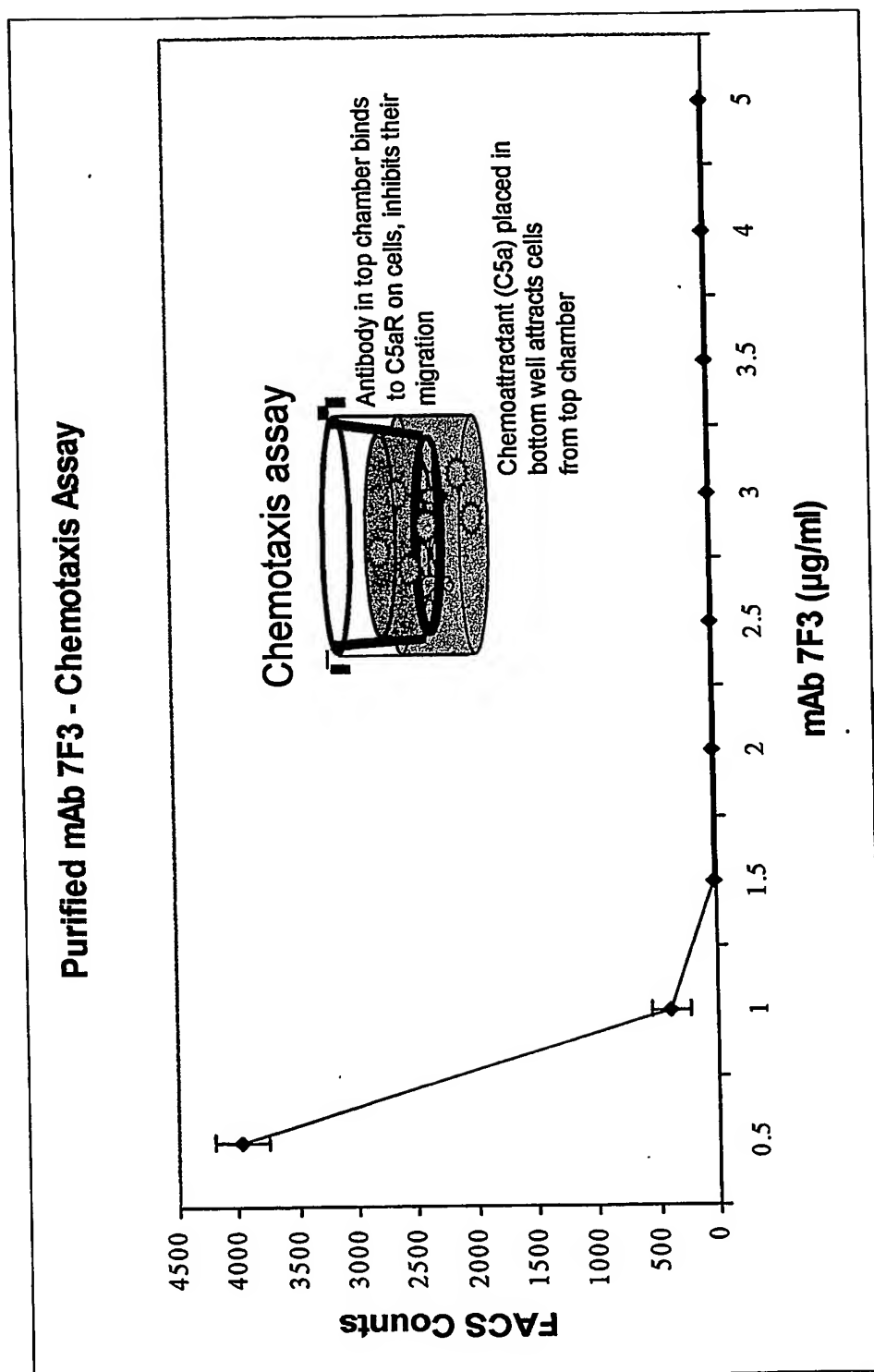


Figure 5

6/15

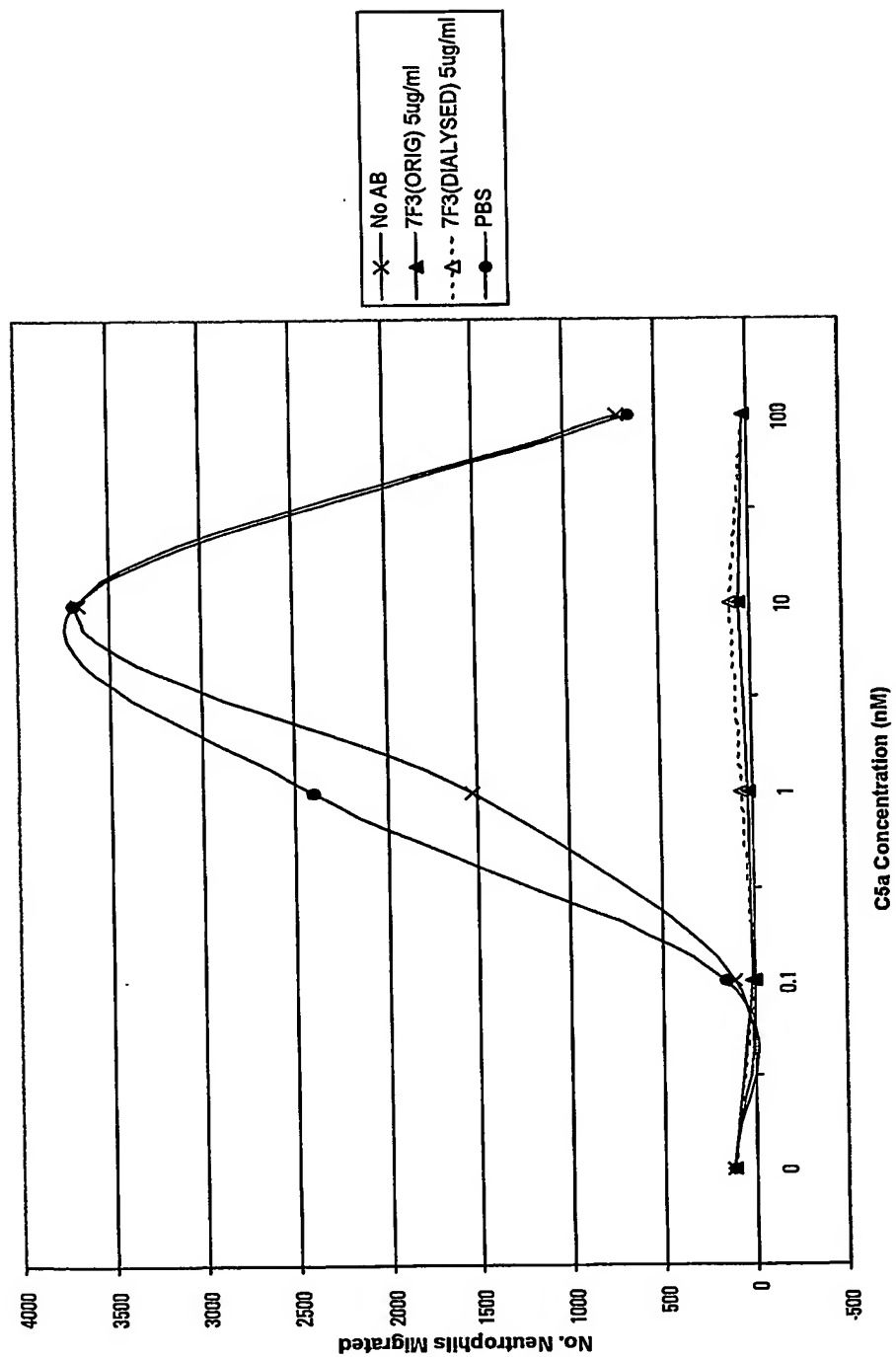


Figure 6

7/15

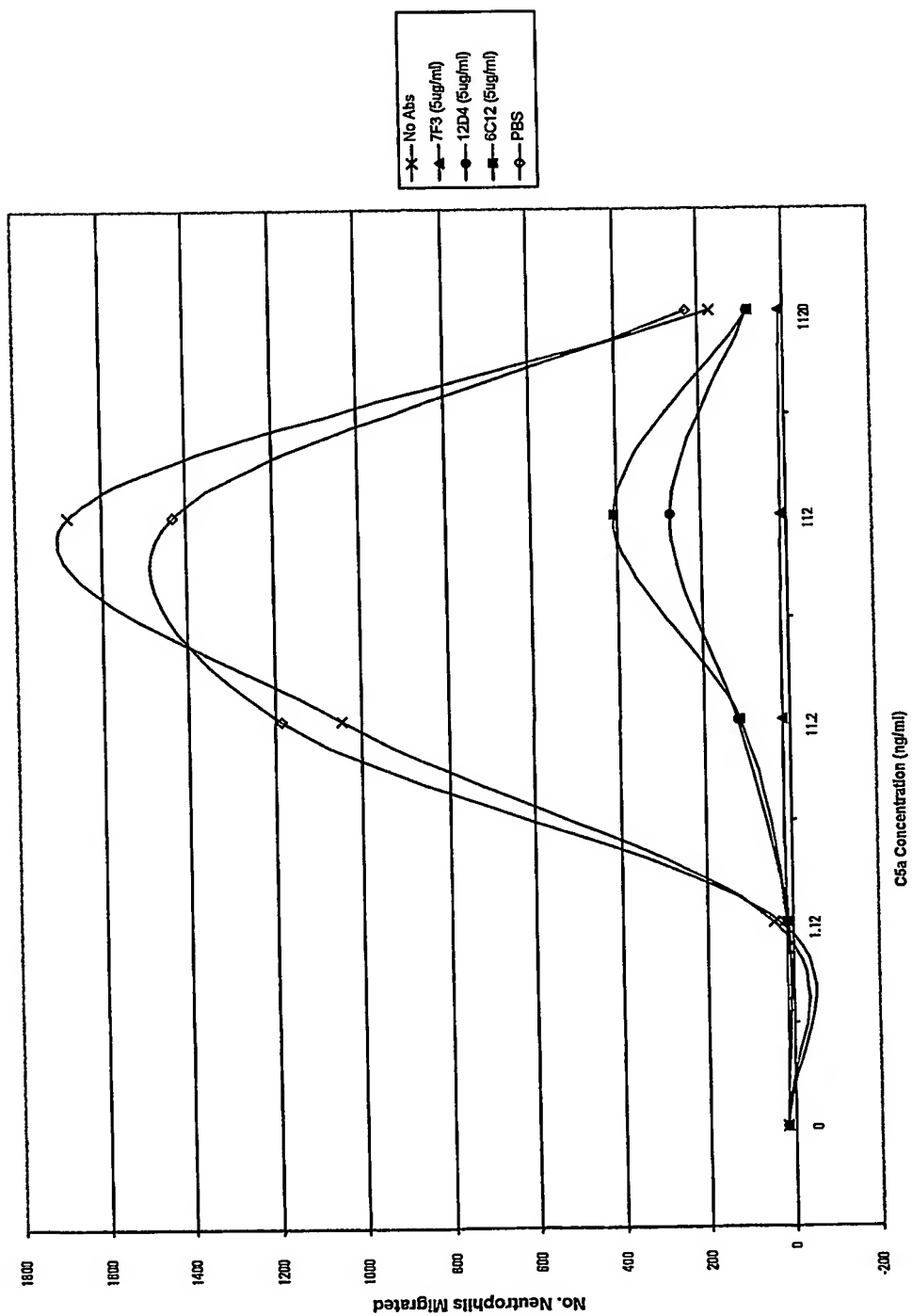


Figure 7

8/15

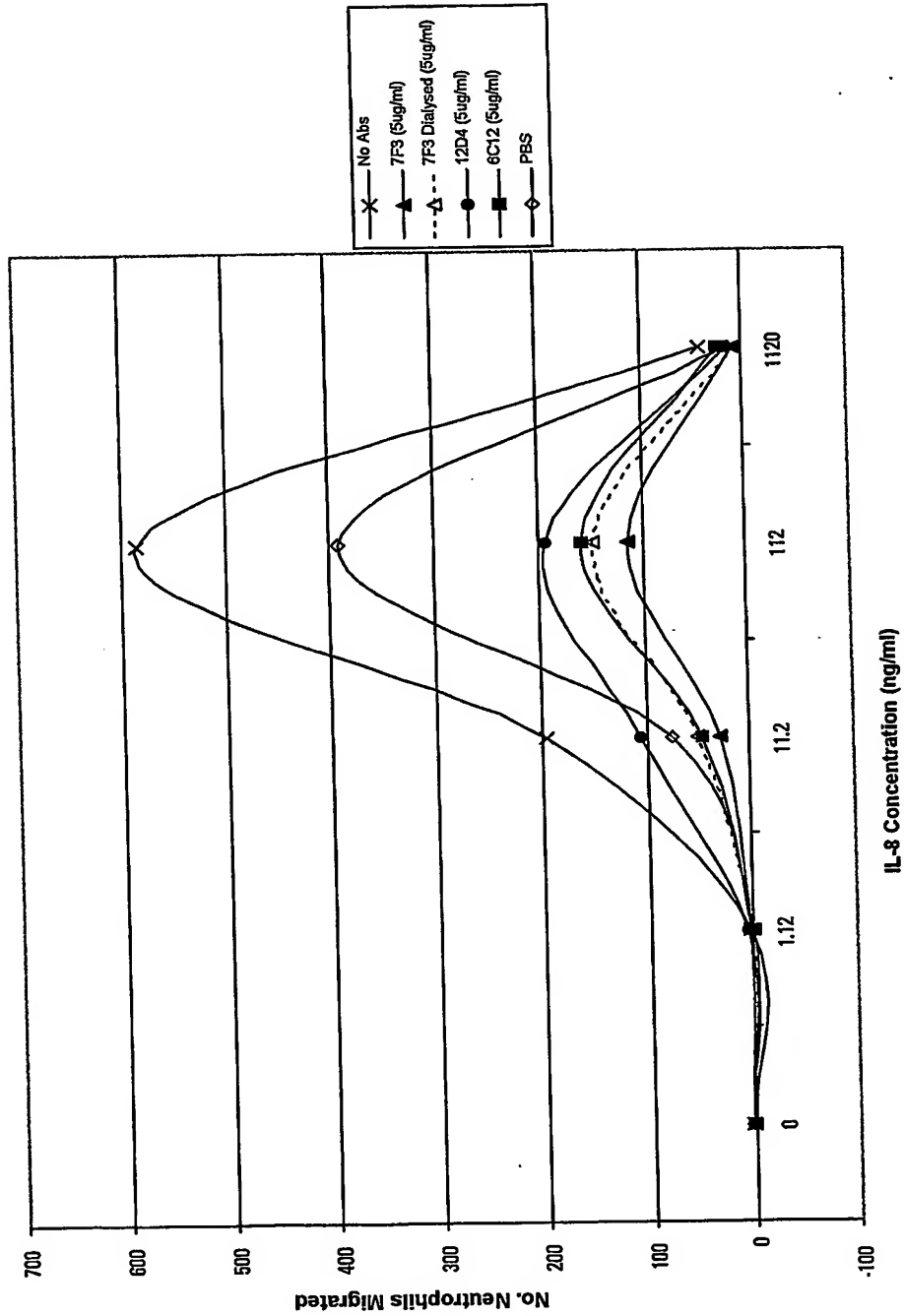


Figure 8

9/15

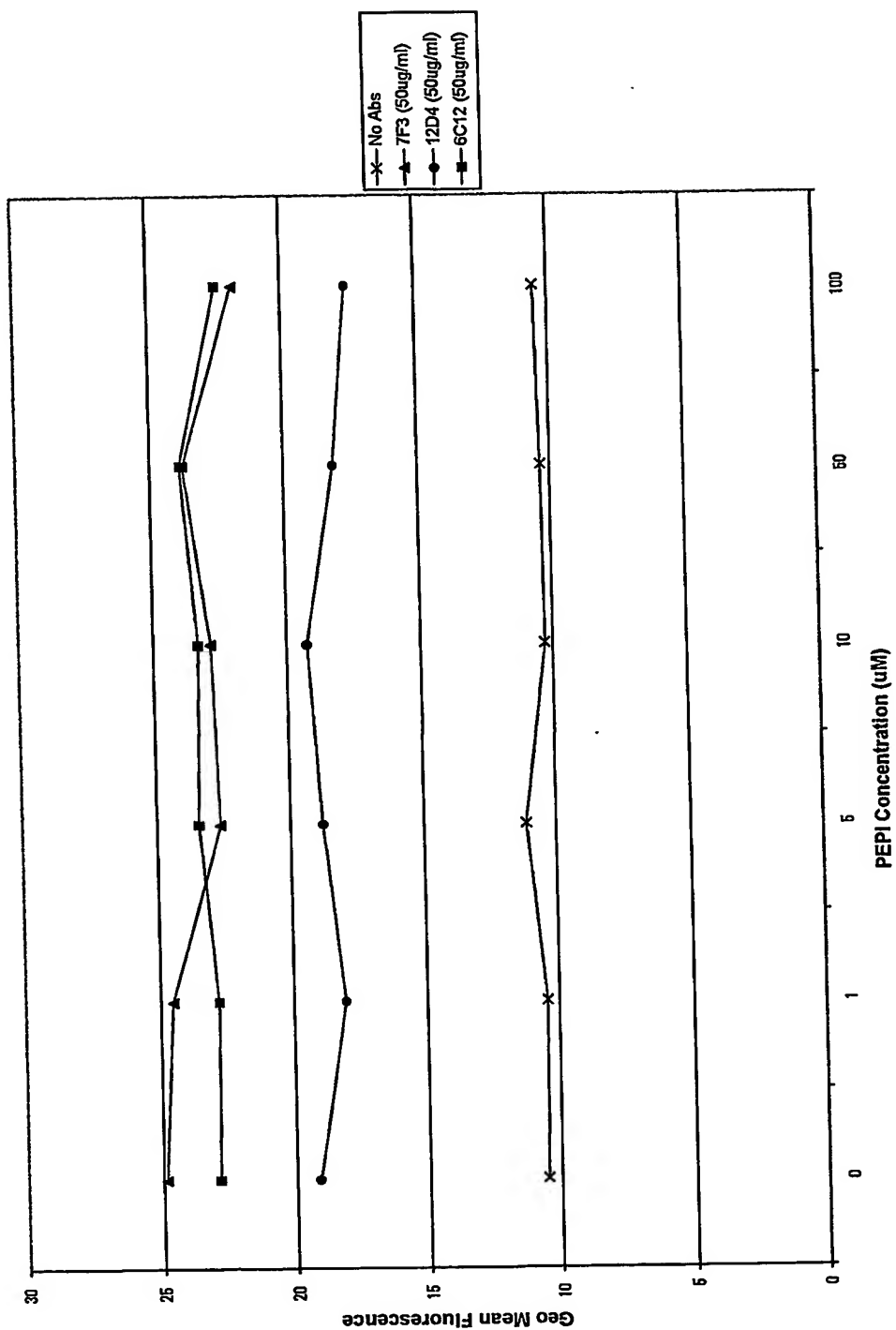


Figure 9a

10/15

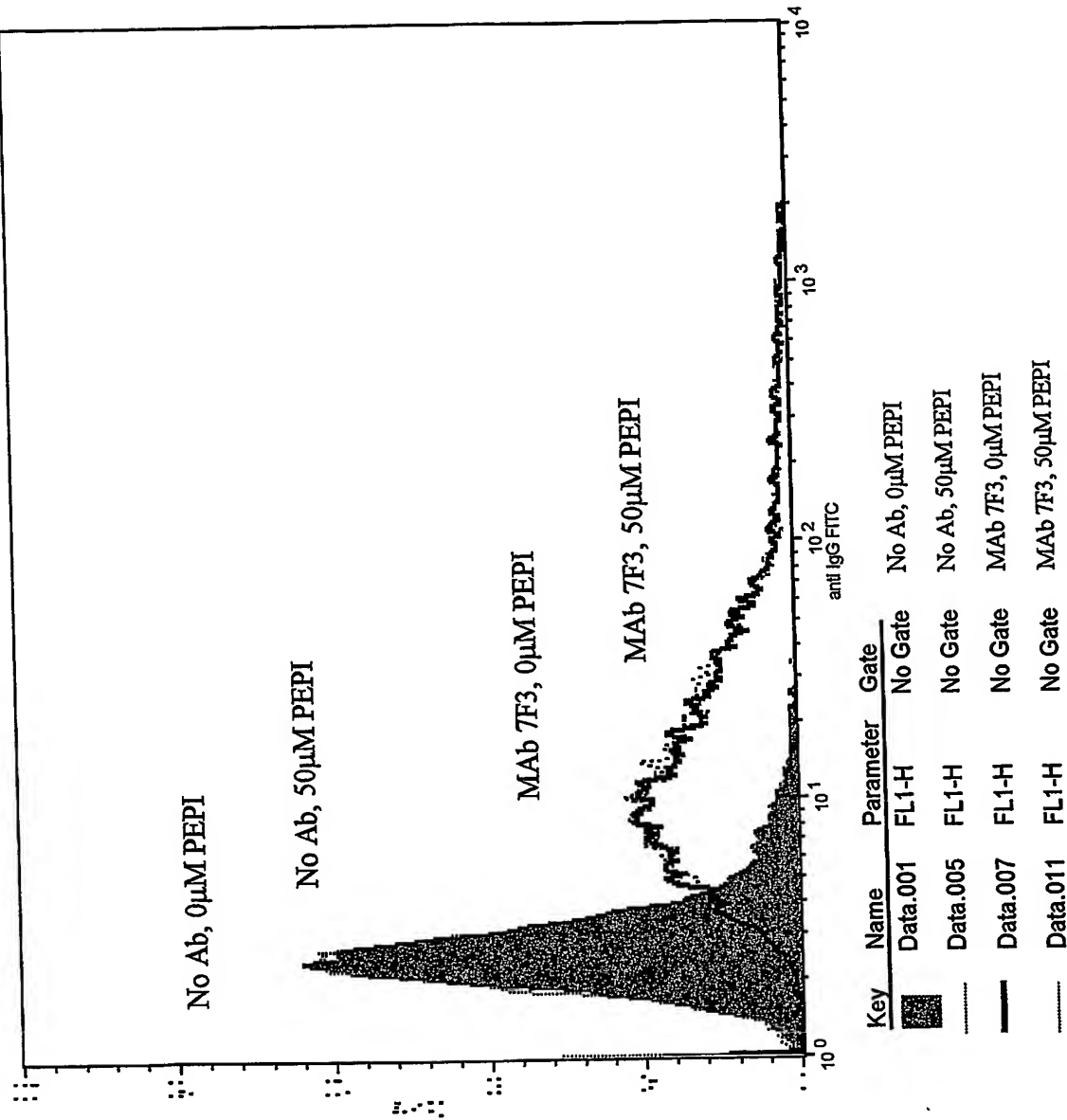


Figure 9b

11/15

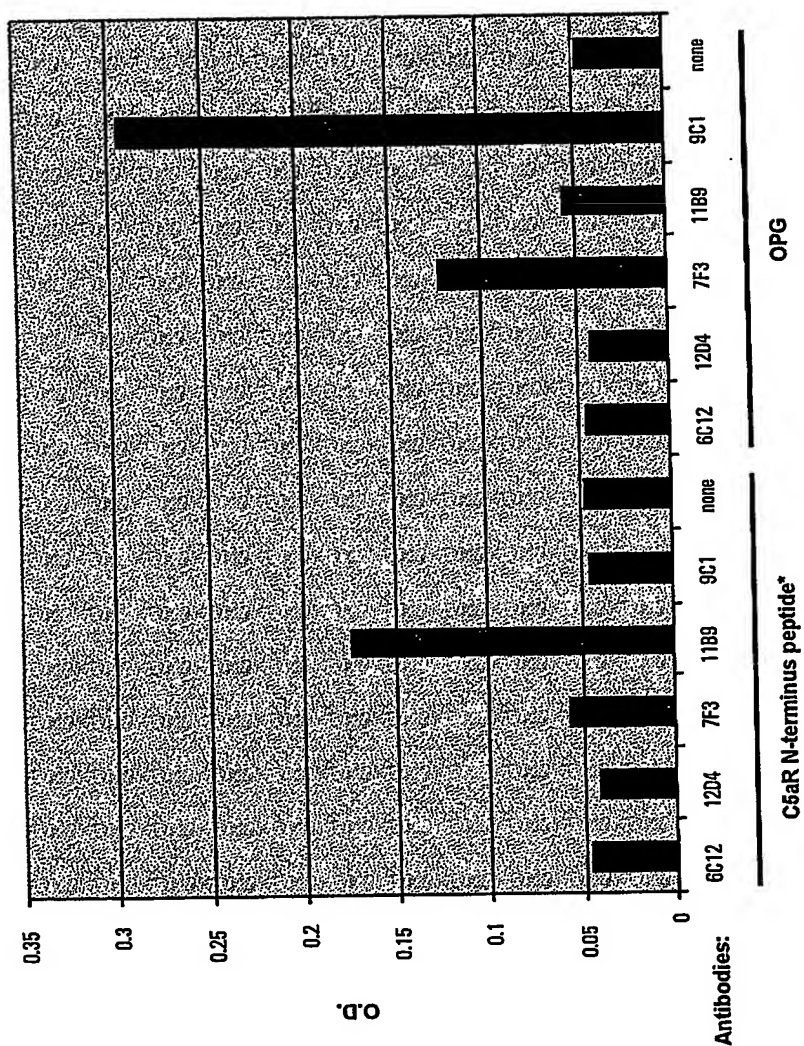


Figure 10

12/15

Anti-C5aR MAb variable light chain DNA sequences

	10	20	30	40	50
7F3 Vk	GATGTTGTGATGACCCAATCTCCACTCTCCCTGCCTGTCAGTCTTGGA				
6c12 Vk	GATGTTGTGATGACCCAAATTCCTCTCCCTGCCTGTCAGTCTTGGA				
12d4 Vk	GATGTTGTGATGACCCAACTCCACTCTCCCTGCCTGTCAGTCTTGGA				

	60	70	80	90	100
7F3 Vk	TCAAGCCTCCATCTCTTGAGATCTAGTCAGAGCCTTGACACAGTAATG				
6c12 Vk	TCAAACCTCCATCTCTTGAGATCTAGTCAGAGCCTTATACACAGTAATG				
12d4 Vk	TCAAGCCTCCATCTCTTGAGATCTAGTCAGAGCCTTGACACAGTAGTG				
	**** *****				
	110	120	130	140	150
7F3 Vk	GAAACACCTATTTACATTGGTACCTGCAGAAGCCAGGCCAGTCTCCAAAG				
6c12 Vk	GAAACACCTATTTACATTGGTACCTGCAGAAGCCAGGCCAGTCTCCAAAG				
12d4 Vk	GAAACACCTATTTACATTGGTACCTGCAGAAGCCAGGCCAGTCTCCAAAG				

	160	170	180	190	200
7F3 Vk	CTCCTGATCTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTT				
6c12 Vk	CTCCTGATCTACAAAGTTTCCAACCGATTTTCTGGGGTCCCAGACAGGTT				
12d4 Vk	CTCCTGATCTACAAAGTCTCCAACCGATTTTCTGGGGTCCCAGACAGGTT				

	210	220	230	240	250
7F3 Vk	CAGTGGCAGTGGATCAGGGACAGATTTCTCACTCAAGATCAGCAGAGTGG				
6c12 Vk	CAGTGGCAGTGGATCAGGGACAGATTTCACTCAAGATCAGCAGAGTGG				
12d4 Vk	CAGTGGCAGTGGATCAGGGACACATTTCACTCAAGATCAGCAGAGTGG				

	260	270	280	290	300
7F3 Vk	AGGCTGAGGATCTGGGAGTTTATTTCTGCTCTCAAAGTACACTTGTTCCT				
6c12 Vk	AGGCTGAGGATATGGGAGTTTATTTCTGCTCTCAAAGTACACATGTTTCCT				
12d4 Vk	AGGCTGAGGATCTGGGAATTTATTTCTGCTCTCAAAGTACACTTGTTCCT				

	310	320	330		
7F3 Vk	CTCACGTTTCGGTGCTGGGACCAAGCTGGAACTGAAA				
6c12 Vk	CCGACGTTTCGGTGGAGGCACCAAGCTGGAAATCAAA				
12d4 Vk	CCGACGTTTCGGTGGAGGCACCAAGCTGGAAATCAAA				
	* ***** * * *				

Figure 11

13/15

Anti-C5aR MAb variable heavy chain DNA sequences

	10	20	30	40	50
7F3 Vh	CAGGTT CAGCTGCAGCAGTCTGGACCTGAGCTGGTGAAGCCTGGGGCCTC				
6c12 Vh	CAGGTT CAGCTGCAGCAGTCTGGACCTGAGGTGGTGAAGCCTGGGGCCTC				
12d4 Vh	CAGGTG CAGCTGAAGGAGTCAGGACCTGGCCTGGTGGCGCCCTCACAGAG				
	*****	*****	**	*****	*****
	60	70	80	90	100
7F3 Vh	AGTGAAGATTTCTGCAAGGCTTCTGGCTACGCATT CAGTAACTCCTGGA				
6c12 Vh	AGTGAAGATTTCTGCAAGGCTTCTGGCTACGCATT CAGTAGGTCCTGGA				
12d4 Vh	CCTGTCCATCACATGCACTGTCTCTGGGTCTCATTAACCAGCTATGGTG				
	**	**	*	*****	*
	110	120	130	140	150
7F3 Vh	TGAAGTGGGTGAAGCAGAGGCCTGGAAAGGGTCTTGAGTGGATTGGACGG				
6c12 Vh	TGAAGTGGGTGAAGCAGAGGCCTGGAAAGGGTCTTGAGTGGATTGGACGG				
12d4 Vh	TAGACTGGGTTCGCCAGTCTCCAGGAAAGGGTCTGGAGTGGCTGGGAGTA				
	*	*****	***	**	*****
	160	170	180	190	200
7F3 Vh	ATTTATCCTGGAGATGGAGATACTAAGTACAATGGGAAGTTCAAGGGCAA				
6c12 Vh	ATTGATGCTGGAGATGGAGATACTAATACAATGGGAAGTTCAAGGGCAA				
12d4 Vh	ATATG---GGGTGTTGGAAGCACAAATTATAATTCAGCTCTCAAATCCAG				
	**	**	*	*****	**
	210	220	230	240	250
7F3 Vh	GGCCCACTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAACTCA				
6c12 Vh	GGCCCACTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAACTCA				
12d4 Vh	ACTGAGCATCAGCAAGGACAACTCCAAGAGCCAAGTTTCTTAAAAATGA				
	*	*	*	*****	***
	260	270	280	290	300
7F3 Vh	GCAGCCTGACATCTGAGGACTCTGCGGTCTATTTCTGTGCAAGATTCTTA				
6c12 Vh	GCAGCCTGACATCTGAGGACTCTGCGGTCTACTTCTGTGCAAGCCTTCTC				
12d4 Vh	ACAGTCTGCAAACCTGATGACGCAGCCATGTACTACTGTGCCAGCCACT--				
	***	***	*	*****	**
	310	320	330	340	350
7F3 Vh	CTTATTAGTACGGTAACAGCCGTTGACTACTGGGGCCAAGGCACCACTCT				
6c12 Vh	ATTACTACGGTAGTGGGAGCTATGGACTACTGGGGTCAAGGAACCTCAGT				
12d4 Vh	ATGGTTACGACGGTCTGGGGT-TTGCTTACTGGGGCCAAGGACTCTGGT				
	*	**	**	*	*****
	360				
7F3 Vh	CACAGTCTCCTCA				
6c12 Vh	CACCGTCTCCTCA				
12d4 Vh	CACTGTCTCTGTA				
	***	*****	*		

Figure 12

14/15

Anti-C5aR MAb variable light chain protein sequences

		FR1		CDR1	FR2	
		10	20	30	40	50
7F3 Vk		DVVM	TQSPLSLPVSLGNQASISC	RSSQSLVHSNGNTYLH	WYLQKPGQSPK	
6c12 Vk		DVVM	TQIPLSLPVSLGDQTSISC	RSSQSLIHSNGNTYLH	WYLQKPGQSPK	
12d4 Vk		DVVM	TQTPLSLPVSLGDQASISC	RSSQSLVHSSGNTYLH	WYLQKPGQSPK	
		*****	*****	*****	*****	*****
		CDR2		FR3		CDR3
		60	70	80	90	100
7F3 Vk	LLIY	KVSNRFS	GVPDRFSGSGSGTDFSLKISRVEAEDLGVYFC	SQSTLVP		
6c12 Vk	LLIY	KVSNRFS	GVPDRFSGSGSGTDFTLKISRVEAEDMGVYFC	SQSTHVP		
12d4 Vk	LLIY	KVSNRFS	GVPDRFSGSGSGTHFTLKISRVEAEDLGIYFC	SQSTLVP		
		****	*****	*****	*****	****
		FR4				
		110				
7F3 Vk	LT	FGAGTKLELK				
6c12 Vk	PT	FGGGTKLEIK				
12d4 Vk	PT	FGGGTKLEIK				
		*	** ***** *			

Figure 13

15/15

Anti-C5aR MAb variable heavy chain protein sequences

	FR1			CDR1	FR2	
	10	20	30		40	50
7F3 Vh	QVQLQQSGPELVKPGASVKISCKASGYAFS		NSWMN	WVKQRP	GKGLEWIG	R
6c12 Vh	QVQLQQSGPEVVKPGASVKISCKASGYAFS		RSWMN	WVKQRP	GKGLEWIG	R
12d4 Vh	QVQLKESGPGLVAPSQSL SITCTVSGFSLT		SYGVD	WVRQSP	GKGLEWLG	V
	****.***.***	***.***	***.***	***.***	*****.***	
	CDR2		FR3			
	60	70	80	90	100	
7F3 Vh	IYPGDGDTKYNGKFKG	KATLTADKSSSTAYMQLSSLTSEDS	SAVYFCAR		FL	
6c12 Vh	IDAGDGDTKYNGKFKG	KATLTADKSSSTAYMQLSSLTSEDS	SAVYFCAS		LL	
12d4 Vh	IW-GVGSTNYNSALKS	RLSISKDNSKSQVFLKMNSLQTD	DAAMYCAS		HY	
	* * * * * *	* * * * *	***.***.***		
	CDR3		FR4			
	110	120				
7F3 Vh	LISTVTAVDY	WGQGTTLTVSS				
6c12 Vh	ITTVVGAMDY	WGQGTSTVTVSS				
12d4 Vh	GYDGLG-FAY	WGQGTTLTVSV				
	. *	*****.***				

Figure 14

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.